

Federal Communications Commission

§ 95.861

[57 FR 8275, Mar. 9, 1992, as amended at 61 FR 32711, June 25, 1996]

§ 95.857 Emission standards.

(a) All transmissions by each CTS and by each RTU shall use an emission type that complies with the following standard for unnecessary radiation.

(b) All spurious and out-of-band emissions shall be attenuated:

(1) Zero dB on any frequency within the authorized frequency segment.

(2) At least 28 dB on any frequency removed from the midpoint of the assigned frequency segment by more than 250 kHz up to and including 750 kHz;

(3) At least 35 dB on any frequency removed from the midpoint of the assigned frequency segment by more than 750 kHz up to and including 1250 kHz;

(4) At least 43 plus 10 log (base 10) (mean power in watts) dB on any frequency removed from the midpoint of the assigned frequency segment by more than 1250 kHz.

(c) When testing for type acceptance, all measurements of unnecessary radiation are performed using a carrier frequency as close to the edge of the authorized frequency segment as the transmitter is designed to be capable of operating.

(d) The resolution bandwidth of the instrumentation used to measure the emission power shall be 100 Hz for measuring emissions up to and including 250 kHz from the edge of the authorized frequency segment, and 10 kHz for measuring emissions more than 250 kHz from the edge of the authorized frequency segment. If a video filter is used, its bandwidth shall not be less than the resolution bandwidth. The power level of the highest emission within the frequency segment, to which the attenuation is referenced, shall be remeasured for each change in resolution bandwidth.

§ 95.859 Antennas.

(a) The CTS antenna includes the radiating element(s), tower, supports and all appurtenances. No CTS antenna shall be elevated higher than necessary to assure adequate service.

(1) A CTS antenna located within a boundary line 16 km (10 miles) outside

the Grade B contour of a TV Channel 13 station may not exceed a maximum Height Above Average Terrain (HAAT), as defined in § 90.309, and maximum ERP as set forth below:

HAAT		Maximum ERP (watts)
(m)	(feet)	
0-36.6	0-120	20.0
36.6-73.2	121-240	5.0
73.3-152.4	241-500	1.2
152.5-304.8	501-1000	0.29
304.9-609.6	1001-2000	0.073

(2) A CTS antenna located beyond a boundary line 16 km (10 miles) outside the Grade B contour of a TV Channel 13 station may not exceed a maximum HAAT, as defined in § 90.309, and maximum ERP as set forth below:

HAAT		Maximum ERP (watts)
(m)	(feet)	
0-152.4	0-500	20.0
152.5-304.8	501-1000	5.0
304.9-609.6	1001-2000	1.2

(b) No CTS antenna shall be located within 61 m (200 feet) of a residential dwelling unless the IVDS system licensee has reduced power such that the field strength of the CTS antenna at the residential dwelling does not increase relative to the field strength of the CTS antenna at 61 m or obtained the written concurrence of the resident(s) within 61 m of the CTS antenna. The written concurrence must be kept as part of the IVDS system authorization.

(c) The RTU may be connected to an external antenna not more than 6.1 m (20 feet) above ground or above an existing man-made structure (other than an antenna structure). Connectors that are used to connect RTUs to an external antenna shall not be of the types generally known as "F-type" or "BNC type." Use of an external antenna is subject to § 95.861.

[57 FR 36373, Aug. 13, 1992]

§ 95.861 Interference.

(a) When an IVDS system suffers harmful interference within its service